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| FORM PTO-1449 (MODIFIED) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| LIST OF PRIOR ARTMADE BY APPLICANT (Use several sheets if necessary) | | | APPLICANT Raymond Jeffrey MAY et al. | |
| | | | FILING DATE 14 May 2001 | GROUP |

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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|------------------|-------|----------|----------------------------|
| EC | AA | 3,338,992 | 08/1967 | Kinney | 264 | 24 | |
| | AB | 3,341,394 | 09/1967 | Kinney | 161 | 72 | |
| | AC | 3,502,538 | 03/1970 | Petersen | 161 | 150 | |
| | AD | 3,502,763 | 03/1970 | Hartmann | 264 | 210 | |
| | AE | 3,542,615 | 11/1970 | Dobo et al. | 156 | 181 | |
| | AF | 3,692,618 | 09/1972 | Dorschner et al. | 161 | 72 | |
| | AG | 3,802,817 | 04/1974 | Matsuki et al. | 425 | 66 | |
| | AH | 3,849,241 | 11/1974 | Butin et al. | 161 | 169 | |
| | AI | 4,340,563 | 07/1982 | Appel et al. | 264 | 518 | |
| EC | AJ | 5,204,429 | 04/1993 | Kaminsky et al. | 526 | 308 | |
| EC | AK | 5,272,236 | 12/1993 | Lai et al. | 526 | 348.5 | |

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| | | | | | | | YES |
| EC | AL | 239 080 A2 | 09/1987 | EPO | D01F | 6/30 | |
| | AM | 37 34 963 A1 | 04/1988 | Germany | C08L | 21/00 | |
| | AN | 90/03464 | 04/1990 | PCT | D04H | 1/56 | |
| EC | AO | 380 781 A2 | 08/1990 | EPO (Abstract) | B05C | 5/02 | |
| EC | AP | 3-67646 | 03/1991 | Japan | B32B | 5/28 | |

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| EC | AR | Cellular Materials to Composites, Encyclopedia of Polymer Science and Engineering, | | | | | |
| | | Vol. 3, pages 299-300, (1985), John Wiley & Sons. | | | | | |
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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary) | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| | | | APPLICANT Raymond Jeffrey MAY et al. | |
| | | | FILING DATE 14 May 2001 | GROUP |

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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| EC | AA | 5,278,272 | 01/1994 | Lai et al. | 526 | 348.5 | |
| | AB | 5,385,775 | 01/1995 | Wright | 428 | 284 | |
| | AC | 5,882,573 | 03/1999 | Kwok et al. | 264 | 510 | |
| | AD | 5,902,540 | 05/1999 | Kwok | 264 | 555 | |
| | AE | 5,904,298 | 05/1999 | Kwok et al. | 239 | 135 | |
| | AF | 2,206,761 | 07/1940 | Bergstein | 93 | 6 | |
| | AG | 2,266,761 | 12/1941 | Jackson, Jr. et al. | 154 | 46 | |
| | AH | 2,357,392 | 09/1944 | Francis, Jr. | 18 | 47.5 | |
| | AI | 2,464,301 | 03/1949 | Francis, Jr. | 154 | 46 | |
| GC | AJ | 2,483,405 | 10/1949 | Francis, Jr. | 154 | 54 | |
| EC | AK | 2,957,512 | 10/1960 | Wade et al. | 154 | 33.05 | |

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| | | | | | | | YES | NO |
| GC | AL | 456 885 B1 | 11/1991 | EPO | A61F | 13/15 | | |
| | AM | 92891 | 02/1992 | Israel | | | | |
| | AN | 92/16371 | 10/1992 | PCT | B32B | 31/00 | | |
| | AO | 547 497 A2 | 06/1993 | EPO | A61F | 13/15 | | |
| GC | AP | 93/15247 | 08/1993 | PCT | D04H | 1/48 | | |

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EXAMINER

Elizabeth M. Cole

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE JUN 04 2001 LIST OF PRIOR ART CITED BY APPLICANT (Use back of page if necessary) | ATTY. DOCKET NO. | SERIAL NO. |
| | | | KCC-14,833 | 09/855,189 |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------------|-------|----------|----------------------------|
| AC | AA | 2,957,852 | 10/1960 | Frankenburg et al. | 260 | 75 | |
| | AB | 3,186,893 | 06/1965 | Mercer | 161 | 60 | |
| | AC | 3,371,668 | 03/1968 | Johnson | 128 | 290 | |
| | AD | 3,391,048 | 07/1968 | Dyer et al. | 161 | 58 | |
| | AE | 3,439,085 | 04/1969 | Hartmann | 264 | 210 | |
| | AF | 3,449,187 | 06/1969 | Bobkowicz | 156 | 161 | |
| | AG | 3,468,748 | 09/1969 | Bassett | 161 | 122 | |
| | AH | 3,575,782 | 04/1971 | Hansen | 161 | 141 | |
| | AI | 3,616,129 | 10/1971 | Sager | 161 | 57 | |
| AC | AJ | 3,629,047 | 12/1971 | Davison | 161 | 57 | |
| AC | AK | 3,669,823 | 06/1972 | Wood | 161 | 141 | |

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| | | | | | | | YES | NO |
| AC | AL | 93/17648 | 09/1993 | PCT | A61F | 13/15 | | |
| | AM | 570 980 A1 | 11/1993 | EPO | A61F | 13/15 | | |
| | AN | 2 244 422 B | 3/1994 | GB | A61F | 13/15 | | |
| | AO | 94/09736 | 05/1994 | PCT | A61F | 13/15 | | |
| AC | AP | 604 731 A1 | 07/1994 | EPO | B32B | 31/00 | | |

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| LIST OF PRIOR ART CITED BY APPLICANT <small>(Use several sheets if necessary)</small> | | APPLICANT | | Raymond Jeffrey MAY et al. | |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------|-------|----------|----------------------------|
| Ef | AA | 3,673,026 | 06/1972 | Brown | 156 | 164 | |
| | AB | 3,676,242 | 07/1972 | Prentice | 156 | 62.4 | |
| | AC | 3,689,342 | 09/1972 | Vogt et al. | 156 | 167 | |
| | AD | 3,752,613 | 08/1973 | Vogt et al. | 425 | 80 | |
| | AE | 3,773,590 | 11/1973 | Morgan | 156 | 244 | |
| | AF | 3,806,289 | 04/1974 | Schwarz | 425 | 72 | |
| | AG | 3,836,416 | 09/1974 | Ropiequet | 161 | 2 | |
| | AH | 3,890,184 | 06/1975 | Morgan | 156 | 244 | |
| | AI | 3,912,567 | 10/1975 | Schwartz | 156 | 167 | |
| V | AJ | 3,917,448 | 11/1975 | Wood | 8 | 125 | |
| EC | AK | 3,949,130 | 04/1976 | Sabee et al. | 428 | 192 | |

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| | | | | | | | YES | NO |
| Ef | AL | 617 939 A2 | 10/1994 | EPO (Abstract) | A61F | 13/15 | | |
| | AM | 2 253 131 B | 10/1994 | GB | A61F | 13/72 | | |
| | AN | 95/03443 | 02/1995 | PCT | D04H | 13/00 | | |
| EC | AO | 95/04182 | 02/1995 | PCT | D04H | 13/00 | | |
| EC | AP | 2 250 921 B | 06/1995 | GB | A61F | 13/15 | | |

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| <i>Elmendorf M. O.</i> | <i>9/23/02</i> |

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| FORM PTO-1449 (MODIFIED) | <p style="text-align: center;">PATENT AND TRADEMARK OFFICE LIST OF PRIOR ART STATED BY APPLICANT <small>(See back of sheet if necessary)</small></p> | | ATTY. DOCKET NO. | SERIAL NO. | |
| JUN 04 2001 | | | KCC-14,833 | 09/855,189 | |
| APPLICANT | | | Raymond Jeffrey MAY et al. | | |
| FILING DATE | | | 14 May 2001 | | |

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| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|-----------------|---------|-----------------|-------|----------|----------------------------|
| El | AA 3,978,185 | 08/1976 | Buntin et al. | 264 | 93 | |
| | AB 4,013,816 | 03/1977 | Sabee et al. | 428 | 288 | |
| | AC 4,090,385 | 05/1978 | Packard | 72 | 191 | |
| | AD 4,107,364 | 08/1978 | Sisson | 428 | 196 | |
| | AE 4,148,676 | 04/1979 | Paquette et al. | 156 | 181 | |
| | AF 4,209,563 | 06/1980 | Sisson | 428 | 288 | |
| | AG 4,211,807 | 07/1980 | Yazawa et al. | 428 | 109 | |
| | AH 4,239,578 | 12/1980 | Gore | 156 | 361 | |
| | AI 4,241,123 | 12/1980 | Shih | 428 | 105 | |
| El | AJ 4,259,220 | 03/1981 | Bunnelle et al. | 260 | 27 BB | |
| El | AK 4,302,495 | 11/1981 | Marra | 428 | 110 | |

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|----|-----------------|---------|---------|-------|----------|-------------|----|
| | | | | | | YES | NO |
| El | AL 95/16562 | 06/1995 | PCT | B32B | 5/24 | | |
| | AM 95/34264 | 12/1995 | PCT | A61F | 13/15 | | |
| | AN 2 268 389 B | 07/1996 | GB | A61F | 13/15 | | |
| | AO 96/23466 | 08/1996 | PCT | A61F | 13/15 | | |
| El | AP 743 052 A2 | 11/1996 | EPO | A61F | 13/15 | | |

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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|-----------------|-------|----------|----------------------------|
| el | AA | 4,303,571 | 12/1981 | Jansen et al. | 260 | 33.6 AQ | |
| | AB | 4,304,234 | 12/1981 | Hartmann | 128 | 287 | |
| | AC | 4,310,594 | 01/1982 | Yamazaki et al. | 428 | 296 | |
| | AD | 4,319,572 | 03/1982 | Widlund et al. | 128 | 284 | |
| | AE | 4,323,534 | 04/1982 | DesMarais | 264 | | |
| | AF | 4,333,782 | 06/1982 | Pieniak | 156 | 176 R | |
| | AG | 4,375,446 | 03/1983 | Fujii et al. | 264 | 518 | |
| | AH | 4,405,397 | 09/1983 | Teed | 156 | 164 | |
| | AI | 4,413,623 | 11/1983 | Pieniak | 604 | 365 | |
| ✓ | AJ | 4,417,935 | 11/1983 | Spencer | 156 | 80 | |
| EC | AK | 4,418,123 | 11/1983 | Bunnelle et al. | 428 | 517 | |

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| | | | | | | | YES | NO |
| el | AL | 96/35402 | 11/1996 | PCT | A61F | 13/15 | | |
| ✓ | AM | 753 292 A2 | 01/1997 | EPO | A61F | 13/15 | | |
| ✓ | AN | 761 193 A2 | 03/1997 | EPO | A61F | 13/15 | | |
| ✓ | AO | 761 194 A2 | 03/1997 | EPO | A61F | 13/15 | | |
| ✓ | AP | 713 546 B1 | 03/1997 | EPO | D04H | 13/00 | | |

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|-------------------|----|-----------------|---------|-----------------|-------|----------|----------------------------|
| <i>EC</i> | AA | 4,440,819 | 04/1984 | Rosser et al. | 428 | 107 | |
| | AB | 4,490,427 | 12/1984 | Grant et al. | 428 | 107 | |
| | AC | 4,496,417 | 01/1985 | Haake et al. | 156 | 361 | |
| | AD | 4,507,163 | 03/1985 | Menard | 156 | 164 | |
| | AE | 4,525,407 | 06/1985 | Ness | 428 | 138 | |
| | AF | 4,543,099 | 09/1985 | Bunnelle et al. | 604 | 385 A | |
| | AG | 4,548,859 | 10/1985 | Kline et al. | 428 | 251 | |
| | AH | 4,552,795 | 11/1985 | Hansen et al. | 428 | 110 | |
| | AI | 4,555,811 | 12/1985 | Shimalla | 2 | 51 | |
| | AJ | 4,572,752 | 02/1986 | Jensen et al. | 156 | 64 | |
| <i>AL</i> | AK | 4,586,199 | 05/1986 | Birring | 2 | 401 | |

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| <i>AL</i> | AL | 763 353 A2 | 03/1997 | EPO | A61F | 13/15 | | |
| <i>AM</i> | AM | 787 474 A1 | 08/1997 | EPO | A61F | 13/15 | | |
| | AN | 806 196 A2 | 11/1997 | EPO | A61F | 13/15 | | |
| | AO | 814 189 A1 | 12/1997 | EPO | D04H | 13/00 | | |
| <i>AP</i> | AP | 98/14156 | 04/1998 | PCT | A61F | 13/15 | | |

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|-------------------|----|-----------------|---------|-----------------|-------|----------|----------------------------|
| <i>EC</i> | AA | 4,606,964 | 08/1986 | Wideman | 428 | 152 | |
| | AB | 4,626,305 | 12/1986 | Suzuki et al. | 156 | 164 | |
| | AC | 4,636,419 | 01/1987 | Madsen et al. | 428 | 131 | |
| | AD | 4,640,859 | 02/1987 | Hansen et al. | 428 | 105 | |
| | AE | 4,652,487 | 03/1987 | Morman | 428 | 138 | |
| | AF | 4,656,081 | 04/1987 | Ando et al. | 428 | 233 | |
| | AG | 4,657,793 | 04/1987 | Fisher | 428 | 36 | |
| | AH | 4,657,802 | 04/1987 | Morman | 428 | 152 | |
| | AI | 4,663,220 | 05/1987 | Wisneski et al. | 428 | 221 | |
| <i>EC</i> | AJ | 4,666,542 | 05/1987 | De Jonckheere | 156 | 164 | |
| <i>EC</i> | AK | 4,675,068 | 06/1987 | Lundmark | 156 | 495 | |

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| | AM | 98/55062 | 12/1998 | PCT | A61F | 13/15 | | |
| | AN | 99/17926 | 04/1999 | PCT | B32B | 5/04 | | |
| <i>EC</i> | AO | 99/60970 | 12/1999 | PCT | A61F | 13/15 | | |
| <i>EC</i> | AP | 00/37003 | 06/2000 | PCT | A61F | 13/15 | | |

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| E | AA | 4,683,877 | 08/1987 | Ersfeld et al. | 128 | 90 | |
| | AB | 4,687,477 | 08/1987 | Suzuki et al. | 604 | 385 A | |
| | AC | 4,692,368 | 09/1987 | Taylor et al. | 428 | 137 | |
| | AD | 4,692,371 | 09/1987 | Morman et al. | 428 | 224 | |
| | AE | 4,704,116 | 11/1987 | Enloe | 604 | 385 A | |
| | AF | 4,718,901 | 01/1988 | Singheimer | 604 | 385 A | |
| | AG | 4,719,261 | 01/1988 | Bunnelle et al. | 525 | 97 | |
| | AH | 4,720,415 | 01/1988 | Vander Wielen et al. | 428 | 152 | |
| C | AI | 4,725,468 | 02/1988 | McIntyre | 428 | 40 | |
| AJ | AJ | 4,726,874 | 02/1988 | Van Vliet | 156 | 495 | |
| al | AK | 4,734,311 | 03/1988 | Sokolowski | 428 | 152 | |

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| G | AL | 99/60969 | 12/1999 | PCT | A61F | 13/15 | | |
| J | AM | 99/60971 | 12/1999 | PCT | A61F | 13/15 | | |
| | AN | 00/37005 | 06/2000 | PCT | A61F | 13/15 | | |
| N | AO | 1 013 251 A1 | 06/2000 | EPO | A61F | 13/15 | | |
| 90 | AP | 547 497 B2 | 07/2000 | EPO | A61F | 13/15 | | |

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| <p style="text-align: center;">LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)</p> | | | | APPLICANT Raymond Jeffrey MAY et al. | |
| | | | | FILING DATE 14 May 2001 | |
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U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------------|-------|----------|----------------------------|
| GC | AA | 4,734,320 | 03/1988 | Ohira et al. | 428 | 231 | |
| | AB | 4,735,673 | 04/1988 | Piron | 156 | 496 | |
| | AC | 4,756,942 | 07/1988 | Aichele | 428 | 102 | |
| | AD | 4,761,198 | 08/1988 | Salerno | 156 | 334 | |
| | AE | 4,762,582 | 08/1988 | de Jonckheere | 156 | 164 | |
| | AF | 4,775,579 | 10/1988 | Hagy et al. | 428 | 284 | |
| | AG | 4,777,080 | 10/1988 | Harris, Jr. et al. | 428 | 212 | |
| | AH | 4,789,699 | 12/1988 | Kieffer et al. | 524 | 271 | |
| | AI | 4,801,345 | 01/1989 | Dussaud et al. | 156 | 164 | |
| QD | AJ | 4,801,482 | 01/1989 | Goggans et al. | 428 | 68 | |
| QD | AK | 4,803,117 | 02/1989 | Daponte | 428 | 228 | |

FOREIGN PATENT DOCUMENTS

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EXAMINER

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| LIST OF PRIOR ART CITED BY APPLICANT <small>(Use several sheets if necessary)</small> | | | | APPLICANT Raymond Jeffrey MAY et al. | | | |
| | | | | FILING DATE 14 May 2001 | | GROUP | |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|------------------|-------|----------|----------------------------|
| <i>RL</i> | AA | 4,804,577 | 02/1989 | Hazelton et al. | 428 | 224 | |
| | AB | 4,826,415 | 05/1989 | Mende | 425 | 722 | |
| | AC | 4,842,666 | 06/1989 | Werenicz | 156 | 161 | |
| | AD | 4,854,985 | 08/1989 | Soderlund et al. | 156 | 85 | |
| | AE | 4,854,989 | 08/1989 | Singheimer | 156 | 161 | |
| | AF | 4,863,779 | 09/1989 | Daponte | 428 | 152 | |
| | AG | 4,874,447 | 10/1989 | Hazelton et al. | 156 | 167 | |
| | AH | 4,883,482 | 11/1989 | Gandrez et al. | 604 | 385.2 | |
| | AI | 4,883,549 | 11/1989 | Frost et al. | 156 | 161 | |
| | AJ | 4,891,258 | 01/1990 | Fahrenkrug | 428 | 138 | |
| <i>GD</i> | AK | 4,892,536 | 01/1990 | DesMarais et al. | 604 | 385.2 | |

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| LIST OF PRIOR ART LISTED BY APPLICANT (Use several sheets if necessary) | | | | APPLICANT Raymond Jeffrey MAY et al. | |
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U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| <i>QC</i> | AA | 4,892,903 | 01/1990 | Himes | 524 | 488 | |
| | AB | 4,900,619 | 02/1990 | Ostrowski et al. | 428 | 284 | |
| | AC | 4,906,507 | 03/1990 | Grynaeus et al. | 428 | 113 | |
| | AD | 4,908,247 | 03/1990 | Baird et al. | 428 | 34.9 | |
| | AE | 4,910,064 | 03/1990 | Sabee | 428 | 113 | |
| | AF | 4,917,696 | 04/1990 | De Jonckheere | 604 | 385.2 | |
| | AG | 4,917,746 | 04/1990 | Kons et al. | 156 | 164 | |
| | AH | 4,929,492 | 05/1990 | Carey, Jr. et al. | 428 | 198 | |
| | AI | 4,938,821 | 07/1990 | Soderlund et al. | 156 | 85 | |
| <i>QC</i> | AJ | 4,965,122 | 10/1990 | Morman | 428 | 225 | |
| <i>QE</i> | AK | 4,968,313 | 11/1990 | Sabee | 604 | 385.2 | |

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| EXAMINER | <i>Genia L. Miller</i> | DATE CONSIDERED |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|-------------------|-------|----------|----------------------------|
| <i>Gl</i> | AA | 4,970,259 | 11/1990 | Mitchell et al. | 524 | 505 | |
| | AB | 4,977,011 | 12/1990 | Smith | 428 | 152 | |
| | AC | 4,984,584 | 01/1991 | Hansen et al. | 128 | 898 | |
| | AD | 4,995,928 | 02/1991 | Sabee | 156 | 164 | |
| | AE | 4,998,929 | 03/1991 | Björksund et al. | 604 | 385.2 | |
| | AF | 5,000,806 | 03/1991 | Merkatoris et al. | 156 | 161 | |
| | AG | 5,002,815 | 03/1991 | Yamanaka et al | 428 | 109 | |
| | AH | 5,060,349 | 10/1991 | Walton et al. | 26 | 18.6 | |
| | AI | 5,073,436 | 12/1991 | Antonacci et al. | 428 | 219 | |
| <i>WU</i> | AJ | 5,093,422 | 03/1992 | Himes | 525 | 98 | |
| | AK | 5,100,435 | 03/1992 | Onwumere | 8 | 115.55 | |

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Elisabeth MCGee

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. | SERIAL NO. |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| <i>el</i> | AA | 5,114,087 | 05/1992 | Fisher et al. | 242 | 42 | |
| | AB | 5,147,487 | 09/1992 | Nomura et al. | 156 | 164 | |
| | AC | 5,169,706 | 12/1992 | Collier, IV et al. | 428 | 152 | |
| | AD | 5,169,712 | 12/1992 | Tapp | 428 | 315.5 | |
| | AE | 5,186,779 | 02/1993 | Tubbs | 156 | 161 | |
| | AF | 5,198,281 | 03/1993 | Muzzy et al. | 428 | 102 | |
| | AG | 5,200,246 | 04/1993 | Sabee | 428 | 109 | |
| | AH | 5,209,801 | 05/1993 | Smith | 156 | 161 | |
| | AI | 5,219,633 | 06/1993 | Sabee | 428 | 109 | |
| <i>el</i> | AJ | 5,226,992 | 07/1993 | Morman | 156 | 62.4 | |
| <i>el</i> | AK | 5,229,191 | 07/1993 | Austin | 428 | 198 | |

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Elizabeth M Cole

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FORM PTO-1449
(MODIFIED)U.S. DEPARTMENT OF COMMERCE
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(Use several sheets if necessary)

ATTY. DOCKET NO.

KCC-14,833

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09/855,189

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Raymond Jeffrey MAY et al.

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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------------|-------|----------|----------------------------|
| RL | AA | 5,232,777 | 08/1993 | Sipinen et al. | 428 | 364 | |
| | AB | 5,236,430 | 08/1993 | Bridges | 604 | 396 | |
| | AC | 5,236,770 | 08/1993 | Assent et al. | 428 | 198 | |
| | AD | 5,238,733 | 08/1993 | Joseph et al. | 428 | 284 | |
| | AE | 5,246,433 | 09/1993 | Hasse et al. | 604 | 396 | |
| | AF | 5,259,902 | 11/1993 | Muckenfuhs | 156 | 164 | |
| | AG | 5,260,126 | 11/1993 | Collier, IV et al. | 428 | 288 | |
| | AH | 5,288,791 | 02/1994 | Collier, IV et al. | 524 | 505 | |
| | AI | 5,296,080 | 03/1994 | Merkatoris et al. | 156 | 496 | |
| D | AJ | 5,304,599 | 04/1994 | Himes | 525 | 98 | |
| DL | AK | 5,308,345 | 05/1994 | Herrin | 604 | 385.2 | |

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EXAMINER

Elizabeth Moore

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. | SERIAL NO. |
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| LIST OF PRIOR ART REFERRED BY APPLICANT (Use several sheets if necessary) | | APPLICANT | | |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------------|-------|----------|----------------------------|
| CC | AA | 5,312,500 | 05/1994 | Kurihara et al. | 156 | 62.4 | |
| | AB | 5,324,580 | 06/1994 | Allan et al. | 428 | 284 | |
| | AC | 5,332,613 | 07/1994 | Taylor et al. | 428 | 152 | |
| | AD | 5,334,437 | 08/1994 | Zafiroglu | 428 | 219 | |
| | AE | 5,334,446 | 08/1994 | Quantrille et al. | 428 | 284 | |
| | AF | 5,336,545 | 08/1994 | Morman | 428 | 152 | |
| | AG | 5,342,469 | 08/1994 | Bodford et al. | 156 | 244.22 | |
| | AH | 5,360,854 | 11/1994 | Bozich, Jr. | 524 | 274 | |
| | AI | 5,366,793 | 11/1994 | Fitts, Jr., et al. | 428 | 198 | |
| | AJ | 5,376,198 | 12/1994 | Fahrenkrug et al. | 156 | 164 | |
| CC | AK | 5,385,775 | 01/1995 | Wright | 428 | 284 | |

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| <i>Glenn Jeffrey Cole</i> | <i>9/02</i> |

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U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|-------------------|-------|----------|----------------------------|
| <i>Q</i> | AA | 5,389,173 | 02/1995 | Merkatoris et al. | 156 | 164 | |
| | AB | 5,393,599 | 02/1995 | Quantrille et al. | 428 | 284 | |
| | AC | 5,405,682 | 04/1995 | Shawyer et al. | 428 | 221 | |
| | AD | 5,407,507 | 04/1995 | Ball | 156 | 163 | |
| | AE | 5,411,618 | 05/1995 | Jocewicz, Jr. | 156 | 164 | |
| | AF | 5,413,654 | 05/1995 | Igaue et al. | 156 | 161 | |
| | AG | 5,413,849 | 05/1995 | Austin et al. | 428 | 293 | |
| | AH | 5,415,649 | 05/1995 | Wantanabe et al. | 604 | 385.2 | |
| | AI | 5,415,925 | 05/1995 | Austin et al. | 428 | 287 | |
| <i>J</i> | AJ | 5,425,987 | 06/1995 | Shawver et al. | 428 | 284 | |
| <i>Q</i> | AK | 5,429,694 | 07/1995 | Herrmann | 156 | 164 | |

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| EXAMINER | <i>Alenah S. M. Cole</i> | DATE CONSIDERED |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|-------------------|-------|----------|----------------------------|
| <i>GD</i> | AA | 5,431,644 | 07/1995 | Sipinen et al. | 604 | 385.2 | |
| | AB | 5,431,991 | 07/1995 | Quantrille et al. | 428 | 109 | |
| | AC | 5,447,462 | 09/1995 | Smith et al. | 450 | 122 | |
| | AD | 5,447,508 | 09/1995 | Numano et al. | 604 | 385.2 | |
| | AE | 5,449,353 | 09/1995 | Watanabe et al. | 604 | 385.2 | |
| | AF | 5,464,401 | 11/1995 | Hasse et al. | 604 | 385.1 | |
| | AG | 5,472,775 | 12/1995 | Obijeski et al. | 428 | 220 | |
| | AH | 5,476,563 | 12/1995 | Nakata | 156 | 167 | |
| | AI | 5,484,645 | 01/1996 | Lickfield et al. | 428 | 198 | |
| <i>GD</i> | AJ | 5,498,468 | 03/1996 | Blaney | 428 | 198 | |
| <i>GD</i> | AK | 5,500,075 | 03/1996 | Herrmann | 156 | 494 | |

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Elizabeth M. W. 9/82

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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
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| GL | AA | 5,514,470 | 05/1996 | Haffner et al. | 428 | 246 | |
| | AB | 5,516,476 | 05/1996 | Haggard et al. | 264 | 211 | |
| | AC | 5,523,146 | 06/1996 | Bodford et al. | 428 | 198 | |
| | AD | 5,531,850 | 07/1996 | Herrmann | 156 | 161 | |
| | AE | 5,534,330 | 07/1996 | Groshens | 428 | 198 | |
| | AF | 5,540,976 | 07/1996 | Shawver et al. | 428 | 198 | |
| | AG | 5,545,158 | 08/1996 | Jessup | 604 | 385.2 | |
| | AH | 5,545,285 | 08/1998 | Johnson | 156 | 496 | |
| | AI | 5,549,964 | 08/1996 | Shohji et al. | 428 | 224 | |
| DL | AJ | 5,569,232 | 10/1996 | Roe et al. | 604 | 385.2 | |
| GL | AK | 5,575,783 | 11/1996 | Clear et al. | 604 | 385.1 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
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EXAMINER

Elizabeth May

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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|---|--|--|--|--------------------------------|--------------------------|
| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| <p style="text-align: center;">LIST OF PRIOR ART RELEVANT BY APPLICANT (Use several sheets if necessary)</p> | | | | APPLICANT | |
| | | | | Raymond Jeffrey MAY et al. | |
| | | | | FILING DATE 14 May 2001 | GROUP |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|----------------|-------|----------|----------------------------|
| <i>el</i> | AA | 5,576,090 | 11/1996 | Suzuki | 428 | 152 | |
| | AB | 5,582,668 | 12/1996 | Kling | 156 | 161 | |
| | AC | 5,591,152 | 01/1997 | Buell et al. | 604 | 385.2 | |
| | AD | 5,597,430 | 01/1997 | Rasche | 156 | 161 | |
| | AE | 5,624,740 | 04/1997 | Nakata | 428 | 204 | |
| | AF | 5,626,573 | 05/1997 | Igaue et al. | 604 | 385.1 | |
| | AG | 5,628,856 | 05/1997 | Dobrin et al. | 156 | 244.18 | |
| | AH | 5,645,672 | 07/1997 | Dobrin | 156 | 244.18 | |
| <i>el</i> | AI | 5,652,041 | 07/1997 | Buerger et al. | 428 | 198 | |
| | AJ | 5,660,664 | 08/1997 | Herrmann | 156 | 161 | |
| <i>el</i> | AK | 5,669,897 | 09/1997 | Lavon et al. | 604 | 385.2 | |

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EXAMINER

Elisabeth M. Dole

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9/82

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| LIST OF PRIOR ART OWNED BY APPLICANT (Use several sheets if necessary) | | | | APPLICANT Raymond Jeffrey MAY et al. | |
| | | | | FILING DATE 14 May 2001 | GROUP |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|------------------|-------|----------|----------------------------|
| RL | AA | 5,681,302 | 10/1997 | Melbye et al. | 604 | 373 | |
| | AB | 5,683,787 | 11/1997 | Boich et al. | 428 | 198 | |
| | AC | 5,690,626 | 11/1997 | Suzuki et al. | 604 | 385.2 | |
| | AD | 5,693,038 | 12/1997 | Suzuki et al. | 604 | 385.2 | |
| | AE | 5,695,849 | 12/1997 | Shawver et al. | 428 | 131 | |
| | AF | 5,709,921 | 01/1998 | Shawver | 428 | 152 | |
| | AG | 5,720,838 | 02/1998 | Nakata | 156 | 167 | |
| | AH | 5,733,635 | 03/1998 | Terakawa et al. | 428 | 198 | |
| | AI | 5,733,822 | 03/1998 | Gessner et al. | 442 | 35 | |
| RL | AJ | 5,735,839 | 04/1998 | Kawaguchi et al. | 604 | 385.2 | |
| | AK | 5,736,219 | 04/1998 | Suehr et al. | 428 | 113 | |

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EXAMINER

Elizabeth M. Mol

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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(Use several sheets if necessary)

ATTY. DOCKET NO.

KCC-14,833

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APPLICANT

Raymond Jeffrey MAY et al.

FILING DATE

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|-------------------|----|-----------------|---------|-----------------|-------|----------|----------------------------|
| <i>Ql</i> | AA | 5,746,731 | 05/1998 | Hisada | 604 | 385.2 | |
| | AB | 5,749,865 | 05/1998 | Yamamoto et al. | 604 | 385.2 | |
| | AC | 5,749,866 | 05/1998 | Roe et al. | 604 | 385.2 | |
| | AD | 5,766,737 | 06/1998 | Willey et al. | 428 | 198 | |
| | AE | 5,769,838 | 06/1998 | Buell et al. | 604 | 396 | |
| | AF | 5,769,993 | 06/1998 | Baldauf | 156 | 164 | |
| | AG | 5,772,649 | 06/1998 | Siudzinski | 604 | 386 | |
| | AH | 5,773,373 | 06/1998 | Wynne et al. | 442 | 260 | |
| | AI | 5,773,374 | 06/1998 | Wood et al. | 442 | 328 | |
| <i>N</i> | AJ | 5,788,804 | 08/1998 | Hörsting | 156 | 440 | |
| <i>QD</i> | AK | 5,789,065 | 08/1998 | Haffner et al. | 428 | 152 | |

FOREIGN PATENT DOCUMENTS

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EXAMINER

Elizabeth M. Ogle

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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| LIST OF PRIOR ART REFERENCED BY APPLICANT (Use several sheets if necessary) | | | | APPLICANT Raymond Jeffrey MAY et al. | |
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| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|--------------------|-------|----------|----------------------------|
| GL | AA | 5,789,328 | 08/1998 | Kurihara et al. | 442 | 387 | |
| | AB | 5,814,176 | 09/1998 | Proulx | 156 | 167 | |
| | AC | 5,817,087 | 10/1998 | Takabayashi et al. | 604 | 385.2 | |
| | AD | 5,830,203 | 11/1998 | Suzuki et al. | 604 | 385.2 | |
| | AE | 5,834,089 | 11/1998 | Jones et al. | 428 | 97 | |
| | AF | 5,836,931 | 11/1998 | Toyoda et al. | 604 | 385.2 | |
| | AG | 5,836,932 | 11/1998 | Buell et al. | 604 | 396 | |
| | AH | 5,876,392 | 03/1999 | Hisada | 604 | 385.2 | |
| | AI | 5,879,776 | 03/1999 | Nakata | 428 | 92 | |
| | AJ | 5,885,686 | 03/1999 | Cederblad et al. | 428 | 107 | |
| GL | AK | 5,897,546 | 04/1999 | Kido et al. | 604 | 391 | |

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| EXAMINER <i>Elizabeth Moe</i> | DATE CONSIDERED <i>9/82</i> |
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| FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| LIST OF PRIOR ART OWNED BY APPLICANT (Use several sheets if necessary) | | | | APPLICANT Raymond Jeffrey MAY et al. | |
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U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|-----------------|-------|----------|----------------------------|
| <i>JL</i> | AA | 5,899,895 | 05/1999 | Robles et al. | 604 | 385.2 | |
| | AB | 5,916,206 | 06/1999 | Otsubo et al. | 604 | 385.2 | |
| | AC | 5,941,865 | 08/1999 | Otsubo et al. | 604 | 385.2 | |
| | AD | 5,952,252 | 09/1999 | Shawver et al. | 442 | 407 | |
| | AE | 5,964,970 | 10/1999 | Woolwine et al. | 156 | 64 | |
| | AF | 5,997,521 | 12/1999 | Robles et al. | 604 | 385.2 | |
| | AG | 6,004,306 | 12/1999 | Robles et al. | 604 | 385.1 | |
| | AH | 6,033,502 | 03/2000 | Coenen et al. | 156 | 64 | |
| | AI | 6,045,543 | 04/2000 | Pozniak et al. | 604 | 385.1 | |
| <i>AO</i> | AJ | 6,057,024 | 05/2000 | Mleziva et al. | 428 | 114 | |
| | AK | Des. 284,036 | 06/1986 | Birring | D2 | 10 | |

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| EXAMINER <i>Elizabeth M. Cole</i> | DATE CONSIDERED <i>9/02</i> |
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| FORM PTO-1449 (MODIFIED) | JUN 04 2001 | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. KCC-14,833 | SERIAL NO. 09/855,189 |
| LIST OF PRIOR ART DOCUMENTED BY APPLICANT (Use several sheets if necessary) | | APPLICANT | Raymond Jeffrey MAY et al. | |
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U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|-------------------|----|-----------------|---------|---------------|-------|----------|----------------------------|
| <i>JK</i> | AA | Des. 331,627 | 12/1992 | Igaue et al. | D24 | 126 | |
| | AB | Des. 335,707 | 05/1993 | Igaue et al. | D24 | 126 | |
| | AC | Des. 340,283 | 10/1993 | Igaue et al. | D24 | 126 | |
| <i>JK</i> | AD | Des. 414,262 | 09/1999 | Ashton et al. | D24 | 126 | |
| | AE | | | | | | |
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| <i>Elisa M. Ido</i> | <i>7/02</i> |

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